A NEW CARALLUMA FROM THE HADHRAMAUT, SOUTHERN ARABIA

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(With Plates VIII and IX)

Caralluma foulcheri-delboscii Lavranos nov. sp. affinis *C. hexagonae* Lavranos sed caulibus uniforme tetragonis, floribus minoribus, lobis corollae adscendentibus, ovatis, lobis coronae exterioris adscendentibus differens.

Caules glabri, ascendentes vel erecti, 10—40 mm. longi, 12—15 mm. lati, quadrangulares, latibus planis vel leviter convexis, angulis sinuato-dentatis, dentibus obtusis; folia minuta, mox decidua; flores 3—8 in fasciculis apicalibus aggregati; bracteae lineares, breves; pedicelli teretes, glabri, 4—6 mm. longi; sepala ovata deltoidea, carinata, viridia, 1·2 mm. longa; corolla rotata-campanulata, tenus 12 mm. diam. inter apices loborum, extus albo-virens, sparse rubro-brunnea punctata, intus albescens, dense maculis rotundatis, convexis, rubro-brunneis—ad apices loborum confluentibus induta, glabra; tubus 2 mm. longus, 4·5 mm. diam.; lobi ovati, acuti, adscendentes, 4 mm. longi, basi 4 mm. lati, extus 5-nervii; loborum apices pilis vibratilibus, simplicibus, compressis, fuscis rubro-brunneis, 2 mm. longis, fasciculatis muniti; corona exterior cyathiformis, fusca rubro-brunnea, 4 mm. diam., lobis adscendentibus, 1·2 mm. longis, bifidis, segmentibus canaliculatis, arcuatis, divergentibus; coronae interioris lobi 1·2 mm. longi, haud conniventes, supra antheras arcte incumbentes, lineares, apice obtusi, fusci rubro-brunnei.

Type Locality: Hadhramaut, Southern Arabia, Southern rocky slopes of the Kor Seiban, North of Mola Matr, lat. 14° 46′ N., long. 48° 46′ E., alt. appr. 1,900 metres, coll. Aug. 22 1962, fl. Heidelberg, June 18 1963, Lavranos 1943, (HEIDELBERG, holotype; KEW, isotype).

Plant succulent, branching freely and forming low, dense groups.

Stems glabrous, glaucous-green ascending, branching, 10—40 mm. long, 12—15 mm. thick, uniformly quadrangular with flat or somewhat convex sides and sinuate-dentate angles, the teeth obtuse.

Leaves minute, soon deciduous.

Flowers 3—8 in fascicles from the apices of young stems.

Bracts linear, short.

Pedicel terete, glabrous, 4—6 mm. long.

Sepals ovate-deltoid, carinate, green, 1·2 mm. long.

Corolla rotate-campanulate, up to 12 mm. diam. between apices of lobes; *outer surface* pale green with a few red-brown, roundish, convex spots; *inner surface* creamy-white, densely covered with red-brown, round, convex spots, which become confluent at the apices of the lobes, but are absent at the base of the tube, glabrous except for a tuft of dark red-brown, simple, compressed, vibratile hairs, up to 2 mm. long at the apex of each lobe; *tube* 2 mm. long, 4·5 mm. diam.; *lobes* ovate, acute, ascending, 4 mm. broad at base, 4 mm. long, outside 5-nerved.

Outer corona cupular, dark red-brown, 4 mm. diam. including the lobes which are 1·2 mm. long, ascending, bifid from about the middle, with arcuately divergent, horn-shaped, canaliculate segments.

Inner corona lobes linear with rounded apices, 1 mm. long, closely incumbent upon but shorter than the anthers, dark red-brown.

This new species is a close ally of *C. hexagona* Lavr. from the Audhali plateau, 200 miles to the West. It differs, however, in being a much less robust plant, with uniformly square stems and rather acute angles, while in *C. hexagona* the stems are usually six-angled with rounded angles. In *C. foulcheri-delboscii* the flowers are very much smaller than in its ally, with ascending, ovate lobes. The outer corona is distinctly cup-shaped with ascending lobes. In *C. hexagona* the lobes both of the corolla and of the outer corona spread horizontally.

C. foulcheri-delboscii was found growing among limestone rocks on the steep southern slopes of the Kor Seiban, highest of the Hadhramaut mountains, about 3 miles North of Mola Matr, which is 54 miles by road to the North of the port of Mukalla. It grows, at the type locality, in considerable numbers and in association with *Acacia* spp., *Ficus salicifolia* Vahl, *Tarchonanthus camphoratus* L., *Dodonaea viscosa* L., *Kalanchoe teretifolia* Defl., *Pancratium maximum* Forsk., *Euphorbia phillipsiae* N.E. Br., *Dorstenia foetida* (Forsk.) Shweinf., various Stapelieae and many Acanthaceae. The species was also collected at various other points in the vicinity of Mola Matr, but not below 1,500 metres.

Living plants which I sent to Prof. Dr. W. Rauh at the University of Heidelberg, Germany, flowered there on June 18 1963, when the excellent photographs accompanying this text were taken.

Professor Rauh has drawn my attention to one of the plants which he received under Lavranos 1943, which produced flowers that are sparsely spotted on the inner surface and have proportionately narrower and longer corolla lobes. In spite of these differences, the plant in question is merely a form of *C. foulcheri-delboscii*.

The species here described is named in honour of Mr. J.-M. Foulcher-Delbosc, of Bergerac, France, in recognition of his love of succulent plants and of his generous contribution towards the cost of my journey to Southern Arabia.

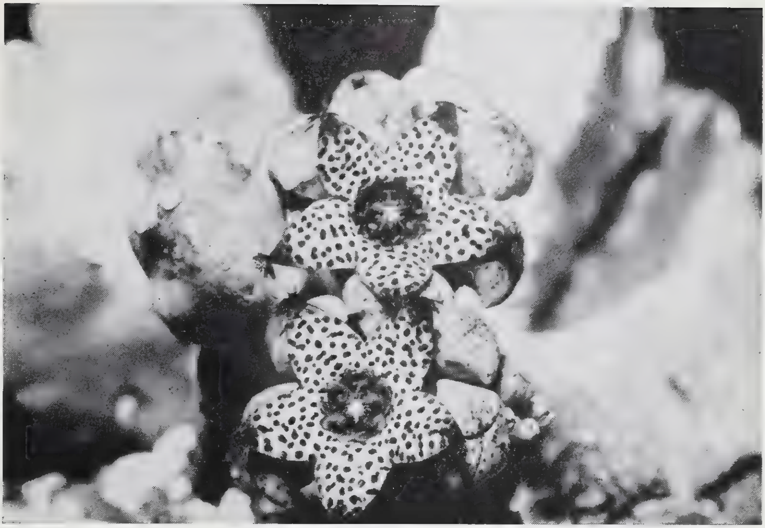

FIG. 1. Fascicles of flowers x3.

Photograph: Prof. Dr. W. Rauh.

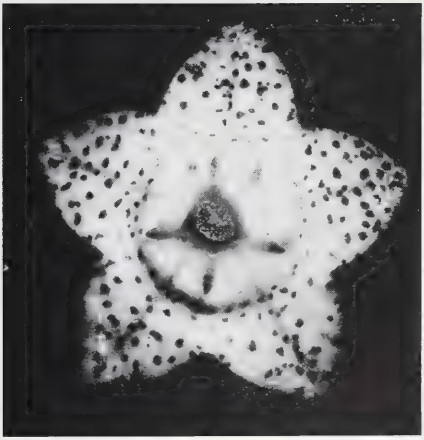

FIG. 2. Outer Corolla surface showing tube and sepals x5.

Photograph Prof. Dr. W. Rauh.

PLATE VIII. *Caralluma foulcheri-delboscii.*

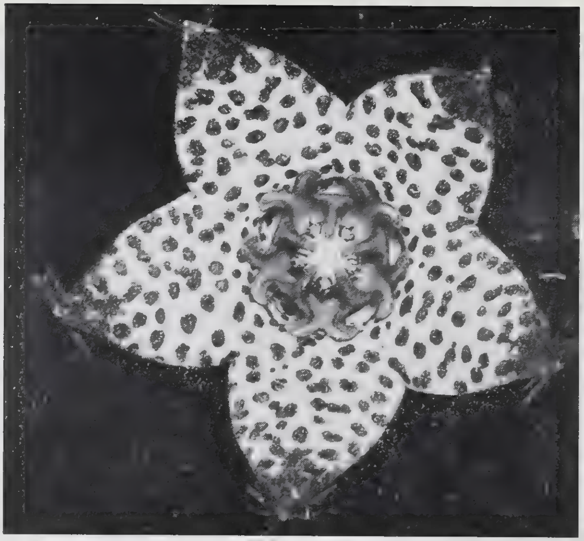

FIG. 1. Flower x6½.

Photograph: Prof. Dr. W. Rauh.

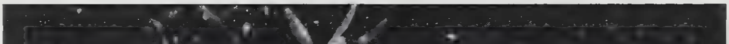

FIG. 2. Dissected flower showing the coronal structure x8

Photograph: Prof. Dr. W. Rauh.

PLATE IX. *Caralluma foulcheri-delboscii.*

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